DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-008929 Address: 333 Burma Road **Date Inspected:** 13-Sep-2009

City: Oakland, CA 94607

Project Name: SAS Superstructure **OSM Arrival Time:** 645 **OSM Departure Time:** 1845 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: CWI Present: Yes Xu Xian Ping No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:**

OBG & TOWER Components **Bridge No:** 34-0006 **Component:**

Summary of Items Observed:

On this date Caltrans OSM Quality Assurance (QA) Inspector, Sandeep Kumar was present during the times noted above for observations relative to the work being performed.

BAY 1

This QA Inspector observed the following work in progress:

FCAW process welding of weld joint #002 located on Counter Weight CW002B – PP104. Welder is identified as 251246. ZPMC QC is identified as Tian Lei. The welding variables recorded by QC appeared to comply with the WPS - B - T - 2232 - Tc - U4b - F - 1.

SAW process welding of weld joint #003 located on Cross Beam CB202B – 015. Welder is identified as 215548. ZPMC QC is identified as Tian Lei. The welding variables recorded by QC appeared to comply with the WPS – B -T - 2221 - B - L2c - S - 2.

FCAW process welding of weld joint #003 located on Counter Weight CW002B – PP098. Welder is identified as 054460. ZPMC QC is identified as Tian Lei. The welding variables recorded by QC appeared to comply with the WPS - B - T - 2232 - Tc - U4b - F - 1.

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FCAW process welding of weld joint #002 located on Counter Weight CW002B - PP096. Welder is identified as 059450. ZPMC QC is identified as Tian Lei. The welding variables recorded by QC appeared to comply with the WPS - B - T - 2232 - Tc - U4b - F - 1.

BAY 2

This QA Inspector observed the following work in progress:

FCAW process welding of weld joint #026 located on Floor Beam FB3013 – 002. Welder is identified as 045209. ZPMC QC is identified as Yand Qing Feng. The welding variables recorded by QC appeared to comply with the WPS - B - T - 2132 - 3.

FCAW process welding of weld joint #046 located on Floor Beam FB3024 – 001. Welder is identified as 045203. ZPMC QC is identified as Yang Qing Feng. The welding variables recorded by QC appeared to comply with the WPS - B - T - 2233 - Tc - U4b - F.

FCAW process welding of weld joint #043 located on Floor Beam FB3013 – 002. Welder is identified as 045209. ZPMC QC is identified as Yang Qing Feng. The welding variables recorded by QC appeared to comply with the WPS - B - T - 2132 - Tc - U4b - F.

FCAW process welding of weld joint #030 located on Floor Beam FB3024 – 001. Welder is identified as 045203. ZPMC QC is identified as Yang Qing Feng. The welding variables recorded by QC appeared to comply with the WPS - B - T - 2133.

BAY 5

This QA Inspector observed the following work in progress:

FCAW process welding of weld joint #005 located on Traveler Rail Bracket TR5C – PP059. Welder is identified as 217185. ZPMC QC is identified as Xu Hong Min. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2232 – Tc – U4c – F.

FCAW process welding of weld joint #006 located on Bike Path BK001 – 020. Welder is identified as 205390. ZPMC QC is identified as Wang Liang. The welding variables recorded by QC appeared to comply with the WPS -B-T-2231-B-U4c-F-1.

FCAW process welding of weld joint #005 located on Traveler Rail Bracket TR6C – PP086. Welder is identified as 215009. ZPMC QC is identified as Xu Hong Min. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2232 – Tc – U4c – F.

FCAW process welding of weld joint #004 located on Bike Path BK001 – 027. Welder is identified as 053742. ZPMC QC is identified as Wang Liang. The welding variables recorded by QC appeared to comply with the WPS -B-T-2231-B-U4c-F-1.

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FCAW process welding of weld joint #004 located on Traveler Rail 10TR3 – 031. Welder is identified as 217805. ZPMC QC is identified as Xu Hong Min. The welding variables recorded by QC appeared to comply with the WPS - B - T - 2231 - B - U2 - F.

FCAW process welding of weld joint #005 located on Traveler Rail Bracket TR5C – PP053. Welder is identified as 215185. ZPMC QC is identified as Xu Hong Min. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2232 – Tc – U4c – F.

FCAW process welding of weld joint #011 located on Bike Path BK001 – 020. Welder is identified as 204342. ZPMC QC is identified as Wang Liang. The welding variables recorded by QC appeared to comply with the WPS -B-T-2231-B-U4c-F-1.

FCAW process welding of weld joint #003 located on Traveler Rail 10TR1 – 020. Welder is identified as 215689. ZPMC QC is identified as Xu Hong Min. The welding variables recorded by QC appeared to comply with the WPS - B - T - 2231 - B - U2 - F.

BAY 6

Magnetic Particle Testing

This QA inspector performed MT of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an MT report for this date. The members are identified as OBG Components. The weld designations reviewed are as follows:

- 1. DP3011 $-001 025 \sim 030$ Green Tag # 10640
- 2. DP3023 001 001~006; 034; 035 Green Tag # 10639
- a. SA6518 001 003; 004

TOWER

This QA Inspector observed the following work in progress:

SMAW process welding of weld joint #7B located on WD1 – A305 – 77M – 3. Welder is identified as 049769. ZPMC QC is identified as Wang Xiao Bing. The welding variables recorded by QC appeared to comply with the WPS - 485 - SMAW - 2G (2F) FCM - Repair - 1.

SMAW process welding of weld joint #10B located on WD1 – A305 – 65M – 3. Welder is identified as 067707. ZPMC QC is identified as Wang Xiao Bing. The welding variables recorded by QC appeared to comply with the WPS – 345 – SMAW – 2G (2F) FCM – Repair.

SMAW process welding of weld joint #1B located on WD1 – A305 – 77M – 3. Welder is identified as 053753. ZPMC QC is identified as Wang Xiao Bing. The welding variables recorded by QC appeared to comply with the WPS - 485 - SMAW - 2G (2F) FCM - Repair - 1.

Cross Beam - 8

This QA Inspector observed the following work in progress:

FCAW process welding of weld joint #088 located on Floor Beam FB204 – 017. Welder is identified as 222396.

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ZPMC QC is identified as Liu Chuang Gang. The welding variables recorded by QC appeared to comply with the WPS - B - T - 2233 - B - U2 - F.

FCAW process welding of weld joint #039 located on Cross Beam CB202G – 020. Welder is identified as 222396. ZPMC QC is identified as Liu Chuang Gang. The welding variables recorded by QC appeared to comply with the WPS - B - T - 2233 - B - U2 - F.

Cross Beam - 9

This QA Inspector observed the following work in progress:

FCAW process welding of weld joint #160 located on Cross Beam CB202G – 023. Welder is identified as 220688. ZPMC QC is identified as Meng Lin Nan. The welding variables recorded by QC appeared to comply with the WPS - B - T - 2132.

FCAW process welding of weld joint #049 located on Floor Beam FB204 – 022. Welder is identified as 220688. ZPMC QC is identified as Liu Chuang Gang. The welding variables recorded by QC appeared to comply with the WPS - B - T - 2232 - B - U2 - F.

BAY 7

This QA Inspector observed the following work in progress:

FCAW process welding of weld joint #055 located on Side Plate SP3026 – 017. Welder is identified as 205774. ZPMC QC is identified as Zhong Chong Biao. The welding variables recorded by QC appeared to comply with the WPS - B - T - 2132.

FCAW process welding of weld joint #040 located on Side Plate SP3026 – 017. Welder is identified as 205774. ZPMC QC is identified as Zhong Chong Biao. The welding variables recorded by QC appeared to comply with the WPS - B - T - 2132.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

Summary of Conversations:

No Relevant Conversations.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang - 15000422372, who represents the Office of Structural Materials for your project.

Inspected By:	Kumar,Sandeep	Quality Assurance Inspector
Reviewed By:	Prue,Erik	QA Reviewer